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<151> 2004-02-23

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taccccata tataataaga aaaaagaga gagtcagcag aagtacgggg agcttaagtg     1020

tagcaatcag aacatcacaa atagtaaata aattaataat aataataatc atatccaaaa     1080

atatttttat tcctaaccta tcgcattgtt acatcgaggg tgaaattcaa aatagacaaa     1140

aagttgggga ataaaatgtg aaaaaagtgg taaaatgttt aatagtgtgg gcgttactgt     1200

tttgtcggtg tgaggtgcgt ggccaccaaa gtgtttttgg tataacgata gaaattggta     1260

agacaaacaa tattgcgaag aaaacccgaa gcattttaa aaagtgcgaa cgtggcagtt     1320

ttaagggttt gtgggcgtgg caataatttt tggcaattcg ataaaaatgt acaggaccaa     1380

atatatgaag aaatataaaa tatttttcaa aatgacagcc agcaaccata catatatata     1440

aataaatgtc ggagacccctt ccttctacct gtaacatact tttccacgaa tctagtattg     1500

gttgatatat aattatgctg tgtataagac caaaatcagt gtacatttcc attggattca     1560

ccaaccggat ggttccggat ggtaatgcaa aatattcatc taagaaacga aaacacctag     1620

aattaaacct gaactgatat gacttatgca catatcagtg aggtgggcag ttcaaagcaa     1680

tcacgatgct ccaagttatt atcgcagtgc agtgaaaaat tcacagtcac cgtcgccaat     1740

tgccaataaa gatcggccat tatacaacag aaccgcgttg aagacgatcg acgaggtcgt     1800

gggtcttatc ttatcaccac ctgaattgag gcatgcctcc agaatgacga gggcatccga     1860

agataatgtg gcccgctatt ttcggccggg actggaccta tgcgacgacc tatgctgatg     1920

acgggagtct gccgctgata tggtgcaatg caaggctcca gtcgggggta taaaagaccc     1980

agtttcggtg cagtcaagac aacagacttt aggtgttggt cgttgagcga accaaagccg     2040

gagcagttga ggaaccaaag aatagcagcg agaggaccaa gg                        2082


<210>   10
<211>   1999
<212>   DNA
<213>   Saccharomyces cerevisiae

<400>   10
tgtagggacc caaatccaat tgtagtagtt accttgatta tggttggctt gtccttcgat      60
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agttttgcct tttccaaagc gctagaaatg gattccatat cgtcgtctcc tttatcgact    120

tccatgactt cccaaccata tgcctcgtat cgcttcaaaa catcttcgtc gaacgagtac    180

gaggttttac cgtcaatgga aatgctatta ctgtcataaa acgtaatcaa gttacccaat    240

tgcagatgtc ccgctaagga agaggtctcc gaagaaacac cctcttgtaa gcaaccatcc    300

cctacaatag caaacgtata tgagtcggaa atgggaaagc catcctcgtt ataagtggcg    360

gcaaagttgg cctgcgctat tgccatacca acagcatttg agataccctg gcctagcgga    420

ccggaagtga tttccactcc cgctgagtgg aattctggat gacccggtgt ccttgagttt    480

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gagtacagaa gagcgcatga gtgaccgttc gacagaacaa acctgtctct attgatccaa    600

tgttcattgt tagggttaca gcgcagttgc ttgaaaatta catgggcaac tggtgccaat    660

cctagtggtg cacctgggtg gccagattgt gcgctttcca cctggtcaac ggaaagtaat    720

cttaaagtgg aaaccgcaag tttatcaatg tcggagaact gtgccatttt tttgttcttt    780

ttttgattag taaggtataa tcgtctacgt agaggttaca aatcgaagac tacagtaaga    840

ggggacaagc caattgaata tacgactgaa ataaatggaa taattctgca ttattacact    900

cgtttatata tccaaacagg tgatctggta ttctcttgac aacgaatgaa gctccctata    960

ttcgacactc cttattcagg actcctccca acaaggagaa gtaggtgttc cttgagctac   1020

cctttaaagc tggggagatg agcttgccct tcctgtcatc gccattatga cgagaaaagt   1080

aaaacatgta gaataaggtc cacccaaaca tgtccgagca atgacgttat atatcgtgtt   1140

ccctgttcaa agcatggcat atgtgccatt aaaggcgaat ttttgtccct agcaaaggag   1200

agacagcgag ccaccattaa gaagtgactt gaaagcaagc gaaaatagct acacatatat   1260

atcaatatat tgacctataa acccaaaatg tgaaagaaat ttgataggtc aagatcaatg   1320

taaacaatta ctttgttatg tagagttttt ttagctacct atattccacc ataacatcaa   1380

tcatgcggtt gctggtgtat ttaccaataa tgtttaatgt atatatatat atatatatat   1440

ggggccgtat acttacatat agtagatgtc aagcgtaggc gcttcccctg ccggctgtga   1500

gggcgccata accaaggtat ctatagaccg ccaatcagca aactacctcc gtacattcat   1560

gttgcaccca cacatttata cacccagacc gcgacaaatt acccataagg ttgtttgtga   1620

cggcgtcgta caagagaacg tgggaacttt ttaggctcac caaaaaagaa agaaaaaata   1680

cgagttgctg acagaagcct caagaaaaaa aaaattcttc ttcgactatg ctggaggcag   1740

agatgatcga gccggtagtt aactatatat agctaaattg gttccatcac cttctttttct   1800

ggtgtcgctc cttctagtgc tatttctggc ttttcctatt ttttttttttc cattttttctt   1860

tctctctttc taatatataa attctcttgc attttctatt tttctctcta tctattctac   1920

ttgtttattc ccttcaaggt ttttttttaa ggagtacttg tttttagaat atacggtcaa   1980
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-10-

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cgaactataa ttaactaaa                                                    1999


<210>  11
<211>  2001
<212>  DNA
<213>  Saccharomyces cerevisiae

<400>  11
tctgctatta ttgatgcttt gaagacctcc agacaaattt ttcacagaat gtactcttac       60

gttgtttacc gtattgcttt gtctctacat ttggaaatct tcttgggtct atggattgct      120

attttggata actctttgga cattgatttg attgttttca tcgctatttt cgctgatgtt      180

gctactttgg ctattgctta cgataatgct ccttactctc caaagcccgt taaatggaac      240

ctaccaagat tatggggtat gtctattatt ttgggcatag ttttagctat aggttcttgg      300

attaccttga ctactatgtt cttaccaaag ggtggtatta tccaaaactt cggtgctatg      360

aacggtatta tgttcttgca aatttccttg actgaaaact ggttgatttt cattaccaga      420

gctgctggtc cattctggtc ttctatccca tcctggcaat ggctggtgc cgtcttcgct       480

gtcgacatca tcgctaccat gtttacctta ttcggttggt ggtctgaaaa ctggactgat      540

attgttactg tcgtccgtgt ctggatctgg tctatcggta tcttctgtgt tttgggtggt      600

ttctactacg aaatgtccac ttctgaagcc tttgacagat tgatgaacgg taagccaatg      660

aaggaaaaga agtctaccag aagtgtcgaa gacttcatgg ctgctatgca aagagtctct      720

actcaacacg aaaaggaaac ctaatcctgt tgaagtagca tttaatcata atttttgtca      780

catttttaatc aacttgattt ttctggttta attttttctaa ttttaatttt aatttttta    840

tcaatgggaa ctgatacact aaaaagaatt aggagccaac aagaataagc cgcttatttc      900

ctactagagt ttgcttaaaa tttcatctcg aattgtcatt ctaatatttt atccacacac      960

acaccttaaa attttagat taaatggcat caactcttag cttcacacac acacacac        1020

cgaagctggt tgttttattt gatttgatat aattggtttc tctggatggt acttttctt      1080

tcttggttat ttcctatttt aaaatatgaa acgcacacaa gtcataatta ttctaataga     1140

gcacaattca caacacgcac atttcaactt taatatttt ttagaaacac tttatttagt      1200

ctaattctta attttaata tataatgc acacacacta atttattcat taatttttta        1260

ttgagtagga tttgaaaata tttggtatct ttgcaagatg tttgtataga gggacaaaga     1320

atcgtcttta ttatggtcaa ggctttacgt cataatagtt cctgcccagc tcttctataa     1380

tactttaaag atctcttctc gtttgctcca tttggaagtc tcgcttacgt ttatgcgccc     1440

atacagacac tcaagataca cacttacatg aacgtataca aatttactaa cactacttga     1500

aaatatgaac cacagtacat catattaaga cgtagtattc gatgattgaa ggccgcctcc     1560

gcgaaatacc tttactgatt ttgccggtta atcgcatcga aatttcttca tcacaagaaa     1620
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gcaaacaaat cgccaggcca ttctacaagt ttccttttct tatgaagatg taaaagctac   1680

taaggcgtca ttactctaga tgactcagtt tagtctgacc ttctatagta tactaccctg   1740

gcgctatgat gatgagcggt ctttttattg cggaaacgaa aattccggga ccggcgaaat   1800

ttgcccggtt ttgtccgtaa ccggcttcat gagtcggctt caatagtagt tgaatactta   1860

tttaaacagc agaacttaac tcactcatca cgctgtttcc gctgaatttt ctcaaaatat   1920

ctaagcagtc aacaaatata aagaatattg aaattgacag tttttgtcgc tatcgatttt   1980

tattatttgc tgttttaaat c   2001

<210> 12
<211> 2000
<212> DNA
<213> Saccharomyces cerevisiae

<400> 12
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gggtatctgc tacttcggga tcgacgaaac aaccacaaag aacttcgtcc tcctgatcat   120

cgctgatcaa aattttacca tcctcgtttc cagctacgtt cggtttggca tctttgtcgc   180

gaacgtcaaa ataagctaac gttgtctggc ccaaagaaat gaatttatat gcagatcttt   240

tatcaaagtg gaaaatatcg ttgatagagt cgccaaaatg tatcgaacga atggaatttg   300

ataatgccaa gttttccgag tttattacgt gtatattacc ggattcatcg cctattaaaa   360

tgaatgggtg agtttgagag gcgcataatt tcgtaaattt atcatttttt ttctcttcag   420

aattaaacag tgagcttaag tttacctttt tgacgacttt gccggtcata gtattggcct   480

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catctttttcc tgtttgcttt tgttgctgtt gttcttcaat atcaacaaat ttcaaatctc   660

cagtttctag gtctatatct aatctaatcc aagggcatac acctttcttt gcatccttgc   720

ctgtagttgc agtgtcaatt ctacgtctac gatctaggtg cgattgcaac ttagcggggt   780

cataacgatg gcacacaata tgtcctgtac caaagccagt tattataatg ggcagttcag   840

gatgtaaaag agactggaaa atgggagctt ttaatgatag taattctaga atgggcaggt   900

ttgttgaatc gacaacatct gttttttttt tgctctttgc catagctgat gcgtggattg   960

tttctaattt cccagctgct tcctcttcca attgtggcga tgatgccatg atttctatgt   1020

taaaattttt ctaaccatga aatttttttt ttctagcgag aaaaaaaatc agaaaaatta   1080

ctattagtga gtattggaga cattgtcaat gggagatgtt ctctttataa tatcttcaac   1140

aggttctttc aactctggaa attcatccac aatcttgtca gcaagtgaat ctcttaattg   1200

cttcaatcca tgcatcttgc ctctttgata ttggttggat cttcttatgg cttccacgaa   1260

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ctctcttgtg taaatatctg gatttctacc gtcctcaatg tattgaacaa cttccaaggg   1320

aatgtccacc ttagacaagc tggattgagg atcgttgctt ctcacgttca gcttgtacaa   1380

gcgatccaca tttctttgca agttggtgat cattcccttg gtggcttctg gagtaccagg   1440

aaaatcatat atcgagacac ctaattcaac gaaggactca ataatcgaag ccacttggtc   1500

ttgagtagtg gccagttctt gctgcaattg ttcattgtta gtgctgtttc cattcatctt   1560

atcggtttat ttttctatat atttgcctct ttctcaaaca ggagttagta gttaaaagta   1620

cgaagttctt gttctttaat gcgcgctgac aaaagaattg gataaagag aatggtgggg     1680

ggacaagaag gaaatttgtc ctagtttaac atgaatggca tcttgttacc gggtggacat   1740

cacctattga ttctaaatat ctttacggtt tatcatactg ttctttattc cgtcgttatt   1800

cttttatttt tatcatcat ttcacgtggc tagtaaaaga aaagccacaa catgactcag     1860

caaatctcga caaagtaaaa gctcatagag atagtattat attgatataa aaaaagtata   1920

ctgtactgtt tgtaaccttt tcaatgcttt aagatcaaaa ctaaggccag caaaggtatc   1980

aacccatagc aactcataaa                                               2000


<210>   13
<211>   2001
<212>   DNA
<213>   Saccharomyces cerevisiae

<400>   13
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tgcgtattta agaatagtca agtaacaatt tgcttattcg ttgatgatat gatattattc   120

agcaaagact aaatgcaaa taagaaaatc ataacaacac tcaagaaaca atacgataca     180

aagataataa atctgggtga aagtgataac gaaattcagt acgacatact tggattagag   240

atcaaatatc aaagaagcaa gtacatgaaa ttaggtatgg aaaaatcctt gacagaaaaa   300

ttacccaaac taaacgtacc tttgaaccca aaaggaaaga aacttagagc tccaggtcaa   360

ccaggtcatt atatagacca ggatgaacta gaaatagatg aagatgaata caaagagaaa   420

gtacatgaaa tgcaaaagtt gattggtcta gcttcatatg ttggatataa atttagattt   480

gacttactat actacatcaa cacattgctc aaccatatac tattcccctc taggcaagtt   540

ttagacatga catatgagtt aatacaattc atgtgggaca ctagagataa acaattaata   600

tggcacaaaa acaaacctac caagccagat aataaactag tcgcaataag cgatgcttca   660

tatggtaacc aaccatatta caagtcacaa attggtaaca ttttcctact caacggaaaa   720

gtgattggag aaagtcgac aaaggcttcg ttaacatgca cttcaactac agaagcagaa     780

atacacgcgg tcagtgaagc tattccgcta ttgaataacc tcagtcacct tgtgcaagaa   840

cttaacaaga aaccaattat taaaggctta cttactgata gtagatcaac gatcagtata   900
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attaagtcta caaatgaaga gaaatttaga aacagatttt ttggcacaaa ggcaatgaga      960

cttagagatg aagtatcagg taataattta tacgtatact acatcgagac caagaagaac     1020

attgctgatg tgatgacaaa acctcttccg ataaaaacat ttaaactatt aactaacaaa     1080

tggattcatt agatctatta cattatgggt ggtatgttgg aataaaaatc aactatcatc     1140

tactaactag tatttacgtt actagtatat tatcatatac ggtgttagaa gatgacgcaa     1200

atgatgagaa atagtcatct aaattagtgg aagctgaaac gcaaggattg ataatgtaat     1260

aggatcaatg aatattaaca tataaaatga tgataataat atttatagaa ttgtgtagaa     1320

ttgcagattc cctttttatgg attcctaaat cctcgaggag aacttctagt atatctacat     1380

acctaatatt attgccttat taaaaatgga atcccaacaa ttacatcaaa atccacattc     1440

tcttcaaaat caattgtcct gtacttcctt gttcatgtgt gttcaaaaac gttatattta     1500

taggataatt atactctatt tctcaacaag taattggttg tttggccgag cggtctaagg     1560

cgcctgattc aagaaatatc ttgaccgcag ttaactgtgg gaatactcag gtatcgtaag     1620

atgcaagagt tcgaatctct tagcaaccat tattttttc ctcaacataa cgagaacaca     1680

cagggcgct atcgcacaga atcaaattcg atgactggaa attttttgtt aatttcagag     1740

gtcgcctgac gcatatacct ttttcaactg aaaaattggg agaaaaagga aaggtgagag     1800

ccgcggaacc ggctttttcat atagaataga gaagcgttca tgactaaatg cttgcatcac     1860

aatacttgaa gttgacaata ttatttaagg acctattgtt ttttccaata ggtggttagc     1920

aatcgtctta ctttctaact tttcttacct tttacatttc agcaatatat atatatatat     1980

ttcaaggata taccattcta a                                             2001


<210>   14
<211>   2001
<212>   DNA
<213>   Saccharomyces cerevisiae

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tagttgacat ttgctcgtca ttggggttcg actgagctgc ggatgtcaac ttcgcaacag      120

cttctgcatg gtttccttga gaaaaatgag actcagcctc tgagattaac ttatccgtat      180

ccatttcaga tctttgctat acgtttgtat cgctatatgt acgttctttt aatgaacttt      240

ctcctttctt tatcgtgtag cttgcttggg tatctttta tgagttgcgg acagtgagat      300

ttttcagaag ggcaattggc caagacacca aaaacgtttg gacgagacag gcatcaaagg      360

acaaggtaaa aggcgttgag ctgtggctgg ctgtgtatgc gtttgaaata ccatggatag      420

atatcaaaga aagataggat gtttcataca aatcccaaat ttggggcgcg gacaactgaa      480

atacgtgggt ccagtggaca cgaaagctgg aatgtttgct ggtgtagact tacttgccaa      540
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-14-

cattggtaag aacgatggat cattcatggg gaagaagtat tttcaaacag agtatcctca   600

aagtggacta tttatccagt tgcaaaaagt cgcatcattg atcgagaagg catcgatatc   660

gcaaacctcg agaagaacga cgatggaacc gctatcaata cccaaaaaca gatctattgt   720

gaggctcact aaccagttct ctcccatgga tgatcctaaa tcccccacac ccatgagaag   780

tttccggatc accagtcggc acagcggtaa tcaacagtcg atggaccagg aggcatcgga   840

tcaccatcaa cagcaagaat ttggttacga taacagagaa gacagaatgg aggtcgactc   900

tatcctgtca tcagacagaa aggctaatca caacaccacc agcgattgga aaccggacaa   960

tggccacatg aatgacctca atagcagcga agttacaatt gaattacgag aagcccaatt   1020

gaccatcgaa aagctacaaa ggaaacaact acactacaaa aggctactcg atgaccaaag   1080

aatggtcctc gaagaagtgc aaccgacttt tgataggtat gaagccacaa tacaagaaag   1140

agagaaagag atagaccatc tcaagcaaca attggagctc gaacgcagac agcaagccaa   1200

acaaaagcag ttttttgacg ctgagaatga acagctactt gctgtcgtaa gccaactaca   1260

cgaagagatc aaagaaaacg aagagagaaa tctttctcat aatcaaccca ctggtgccaa   1320

cgaagatgtc gaactcctga aaaaacagct ggaacaatta cgcaacatag aagaccaatt   1380

tgagttacac aagacaaagt gggctaaaga acgcgaacaa ttgaaaatgc ataacgattc   1440

gctcagtaaa gaataccaaa atttgagcaa ggaactattt ttgacaaaac cacaagattc   1500

ctcatcggaa gaggtggcat ccttaacgaa aaaacttgaa gaggctaatg aaaaaatcaa   1560

acagttggaa caggctcaag cacaaacagc cgtggaatcg ttgccaattt tcgaccccccc   1620

tgcaccagtc gataccacgg caggaagaca acagtggtgt gagcattgcg atacgatggg   1680

tcataataca gcagaatgcc cccatcacaa tcctgacaac cagcagttct tctaggcagt   1740

cgaactgact ctaatagtga ctccggtaaa ttagttaatt aattgctaaa cccatgcaca   1800

gtgactcacg ttttttttatc agtcattcga tatagaaggt aagaaaagga tatgactatg   1860

aacagtagta tactgtgtat ataatagata tggaacgtta tattcacctc cgatgtgtgt   1920

tgtacataca taaaaatatc atagcacaac tgcgctgtgt aatagtaata caatagttta   1980

caaaattttt tttctgaata c   2001

<210> 15
<211> 2001
<212> DNA
<213> Saccharomyces cerevisiae

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aactaggcat ggaaagtata aattcaaact ccgattcgga cagaataaac gggtcatatt   120

cacaagtgga ttttggtaac aataacgacg aggacgatat gaacctgttc gacccagatt   180

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ttatggcaca agaccaattg cgtgctgaag aaagagacta caacaaggat gatagaacac      240

ccttagctaa ggtccctgcg gcctttcaat caactggatt gggcataacc cccgatgacg      300

atatcgagag acaatacata acggaacaca gatcacgaca tgaagtgcca aagcggtctc      360

ccgagaaacc ctccaacccg ctggaaatag gtaacccata cgcgaaacct ggcacaaggt      420

tgaataccac tcacacccac agcaaaactg atcgtagcat tacccctcag aggggccagc      480

cagtcccatc aggccagcag atttcctcct acgtgcagcc agcaaacatt aatagtccta      540

acaaaatgta tggtgcaaac aactcggcaa tgggttcgcc caggaatcca aagacgagag      600

cgccaccagg tccatacaat cagggatgga ataaccgccc ctcgccttca aatatttacc      660

aacgtcctca tccctcagat acacaaccac aagcatatca tctccccgga aacccatact      720

caacggggaa caggccaaac atgcaagcgc aatatcaccc gcagcaggtg cccatgccta      780

tcctgcagca gcccaatcgc ccgtaccaac cttatgcgat gaatacgcac atgggctctc      840

ctggcggata tgctggggca gcaccaccat ttcagccagc taacgtcaac tacaatacta      900

ggcctcagca gccatggcct acacctaact caccatccgc acactaccgt ccgccccta       960

acctgaacca gcctcaaaac ggtagtgctg gttactatcg tccgccggca ccacaattgc     1020

aaaactccca agcccgtcca caaaagaagg acggattctc acagttcatg ccatctgcaa     1080

ctacgaagaa cccatatgcc cagtaactcg accgactggt tgtaatttta caaaaagaga     1140

gacaattaag aaaagaaaca agcgccaggc ttccgtatcc cagttttttca tctcactttc     1200

tgggcacgat tgtaataata cttcatgata ataactaaac tatataagta gtgtctcatc     1260

cgtaaatata catttagaca gattcttgta ttttctccgg gcaattttta actttttttc     1320

tgttagggca catgacactt gcctattatg gacagccagt aaagatgtgc catatattgc     1380

cccctttacg ctctctgcca gtattagtgg gaaaaaaaaa actgaaaaaa aaaaaatcgc     1440

agactactaa taatcacgtg atatttcttt tcactctctt cataaagttg ctaaaaacac     1500

acaatcgaat gagcctctga gcagtataaa ttgtacttca aagcactagt catgaaaaac     1560

gcttacatta gttcagtttg tcaaggttat gctattactt gtacttattt cttgctattg     1620

ttagtggctc cccacattga cgtattttca cgtgatgcgc ctcactgcgg aaggcgccac     1680

acattgcctg caaaaaattg tggatgcact catttgatag taaactaagt catgttaatc     1740

gtttggattt ggcacacacc cacaaatata cacattacat atatatatat attcaaaata     1800

cagctgcgtc caatagatga gcttccgctt cgttgtacaa cctacctgct atcttgttca     1860

cggatatttc ttgcttttaa taaacaaaag taactctaga acagtcaagt cttcgataat     1920

ttttttagtc acagggtccg tctaaagttt ctctttattt ggaataatag aaaagaaaga     1980

aaaaaacgta gtataaaagg a                                               2001
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<210> 16
<211> 2000
<212> DNA
<213> Saccharomyces cerevisiae

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atctatcgtc ttctatctca agccaacctg gttcgtacgg ttcttggttc aacaaaaggc   180

caacaatttc tcagttcttt caaccaagcc cttctttaaa acacaacgag tcgtgggaga   240

ggctgcaaac aactgctgga aatatgcaaa ggacttcaag ttcgtcttct ttgcagcaag   300

caacctccag gttatcacta accactccgc aacaatcacc gtctatcagc gaatatgatg   360

agtatccttg atgggcaca cctggctctc ctaatgttgg agatgtgtct cacgcacccc   420

cattggttaa gaatatatca tataaatttc cactaaagaa cgttgagttg aaaagagatt   480

gccaaaggat ctctcaggat gatcttttgg atgaggcttt tgaaagaata tgtcagccct   540

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ttttgactac tgattctgat attgatgatg gcttgatgaa taaacctctg gaactattgc   660

cgaaatatac aatgtattta acccatttta acaatttttt ccagttgcaa gcatgtcctg   720

ctggtcaaga atcagagagc agaataacaa attctatgaa gattgacctg ttaaaggcgg   780

attacacaag aagtctatta gtatcgttac gttcaaggga cattagggat gtcgcattga   840

aaagagagtt tactggcaat aacaacaata acagcaacca gaatatctat gatgagaatt   900

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agattggcaa gctaagtact agtttggaaa actgcgttaa ttttgttgaa aatagtataa   1020

agagtgcaat gatgttatat gatgataatg gaatagatag tgagcttcgc gattcagaag   1080

ctttacggat tttttcatct cttgttcatt attgtaatgc aggttaatgt tttctccttc   1140

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cgcaacttca atttgttgat tcgccaaagt attcttacca taaacaacc attcgttgct   1320

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gtagaccggc caagcaggcc ttgtaatgtt tctcttgatt gcttgaatct tttaagcagc   1440

caaatctttc caaaaaaatg caattatcag aacaaaacta tttaaggtga cttctccgta   1500

tttacaccac cagaagcgtt ctggctcccc ttttctctaa acgttaaaca ttttacaatt   1560

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tcaataattg catcattgga tgcgtttcat ttggccgtta tcacggagag gcagagttct      1800

ctccacaatt tgggcagaag tcttttgaaa agacatatat atatatatat atgtatatga      1860

gtggatgctt aaggtaagaa taatttctga attcccaagt attcattttg tgcagtattc      1920

acatattcta ttttattgct ttttaacttt agaggcaatt aaatttgtgt aggaaaggca      1980

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agatcggact ctgccgtgtc aattgtacat ttgaaacgtg cgcccttcaa ggttacagtg      180

attggttctg gtaactgggg gaccaccatc gccaaagtca ttgcggaaaa cacagaattg      240

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gaaaatctga cggatatcat aaatacaaga caccagaacg ttaaatatct acccaatatt      360

gacctgcccc ataatctagt ggccgatcct gatcttttac actccatcaa gggtgctgac      420

atccttgttt tcaacatccc tcatcaattt ttaccaaaca tagtcaaaca attgcaaggc      480

cacgtggccc ctcatgtaag ggccatctcg tgtctaaaag ggttcgagtt gggctccaag      540

ggtgtgcaat tgctatcctc ctatgttact gatgagttag gaatccaatg tggcgcacta      600

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ttgctgttcc acagacctta cttccacgtc aatgtcatcg atgatgttgc tggtatatcc      780

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gcagatctga tcaccacctg ctcaggcggt agaaacgtca aggttgccac atacatggcc     1020

aagaccggta agtcagcctt ggaagcagaa aaggaattgc ttaacggtca atccgcccaa     1080

gggataatca catgcagaga agttcacgag tggctacaaa catgtgagtt gacccaagaa     1140

ttcccattat tcgaggcagt ctaccagata gtctacaaca acgtccgcat ggaagaccta     1200

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acaactacta ctagtaacat tactacagtt attataattt tctattctct ttttctttaa     1380
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-18-

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gtgtaatctg agcagttgcg agacccagac tggcactgtc tcaatagtat attaatgggc   1860

atacattcgt actcccttgt tcttgcccac agttctctct ctctttactt cttgtatctt   1920

gtctccccat tgtgcagcga taaggaacat tgttctaata tacacggata caaaagaaat   1980

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<210>  18
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tcttttgaag gagatttgta acctggaatc tcactataat gaacacattc accggattca    240

cacttcaaag taatataagg gtcaccaaac acggtcaata tcaaatcatt catagaaggc    300

tcactgaatt tacattgcct tgtttctaaa tcacagctga aatctcctgg ccctttattt    360

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ggaacgcatt tgcattgaac gtcattacac ttataatggg aggtattctg ttccaagtcg    480

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catggcgggc atgtatcatt gcccttatct tgtgcagtta gacgcgaatt tttcgaagaa   1020
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-19-

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cttttattta accttaattt ttattttaga ttcctgactt caactcaaga cgcacagata      1260

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aactatcgca tacctgcatt taaagatgcc gatttgggcg cgaatccttt attttggctt      1380

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aggggggtggt ttagtttagt agaacctcgt gaaacttaca tttacatata tataaacttg      1860

cataaattgg tcaatgcaag aaatacatat ttggtctttt ctaattcgta gttttttcaag      1920

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<211>   1999
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cctacaggcg caagataaca catcaccgct ctcccccctc tcatgaaaag tcatcgctaa      180

agaggaacac tgaaggttcc cgtaggttgt ctttggcaca aggtagtaca tggtaaaaac      240

tcaggatgga ataattcaaa ttcaccaatt tcaacgtccc ttgtttaaaa agaaaagaat      300

ttttctcttt aaggtagcac taatgcatta tcgatgatgt aaccattcac acaggttatt      360

tagcttttga tccttgaacc attaattaac ccagaaatag aaattaccca agtggggctc      420

tccaacacaa tgagaggaaa ggtgactttt taaggggggcc agaccctgtt aaaaaccttt      480

gatggctatg taataatagt aaattaagtg caaacatgta agaaagattc tcggtaacga      540

ccatacaaat attgggcgtg tggcgtagtc ggtagcgcgc tcccttagca tgggagaggt      600

ctccggttcg attccggact cgtccaaatt attttttact ttccgcggtg ccgagatgca      660
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gacgtggcca actgtgtctg ccgtcgcaaa atgatttgaa ttttgcgtcg cgcacgtttc   720

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tgagtgaaac tgttacgtta ccttaaattc tttctccctt taattttctt ttatcttact   1920

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gccatctatt gaagtaataa taggcgcatg caacttcttt tcttttttt tcttttctct     1620

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ttgctatcaa gtataaatag acctgcaatt attaatcttt tgtttcctcg tcattgttct     1920

cgttcccttt cttccttgtt tcttttttctg cacaatattt caagctatac caagcataca     1980

atcaactatc tcatatacaa tgtctatcc                                       2009
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<212> DNA
<213> Saccharomyces cerevisiae

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attttttgta catcgtacca tgatcttcac ccagcatata gtccaggaga gtcgcgatcg   360

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-23-

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ggcagaaaat gctgccaagc aattgtctgc tttgaatatc accattaagg aggacgaatc       180

gctaccagct gccattaaga ctagaattta tgactcttat ccaaggtcg gacaaagagt        240

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cagagacgga tctggtttca ttcaatgtgt cttgtccggt gatttggcat ggctcaaca        360

aactttggac ctgactttgg aatccaccgt tactctgtac ggtaccatag tcaaattgcc       420

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cacaagaaga catttgtccg aatatacccca tatcgaagct gaattggcct tcttgacttt      900

cgacgatcta ttacaacata ttgaaacttt gatcgtcaaa tccgtgcaat acgttttgga       960

agacccaatt gctggcccac tcgtaaaaca attgaatcca aactttaagg ctccaaaggc      1020

tccattcatg agattacagt acaaggatgc cattacctgg ttgaacgaac acgacatcaa      1080

gaacgaagag ggcgaagact ttaaatttgg tgacgatatt gcagaagctg ctgaaagaaa      1140

gatgaccgat accatcggcg tcccaatctt tttgacgaga ttcccagtag aaatcaagtc      1200

tttctacatg aagcgttgtt ctgacgaccc ccgcgtcact gaatccgtcg acgttttgat      1260

gccaaacgtt ggtgaaatca ctggtggttc tatgagaatc gacgacatgg acgaactaat      1320

ggcagggttt aagcgtgagg gtattgatac cgacgcctac tactggttca ttgaccaaag      1380

aaaatacggt acttgcccac atggtggtta cggtatcggt accgaacgta ttttagcctg      1440

gttgtgtgac agattcactg tcagagactg ttccttgtat ccacgtttca gcggtagatg      1500

taagccatga tctttagtta ctgaagagta cgtgagcgct cacatatata caaatattta      1560
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taccgattaa tatttacgtt cctccctctc tctaattatt cattgattta ttcaagaatt   1620

agcgttataa caataaatgg ttggcgcagg caattaattt ttctttactc ttccaaaccc   1680

tctgttaacg acaatcaaat aacctgatct gccaaggctc catcatatct ggcctagaac   1740

agtttttttt tttcgattat ttgttcgttc ttgtggtggt tactcattgg cagaatcccg   1800

aaaatcatga ttagtagatg aatgactcac tttttggata agctggcgca aattgaaaca   1860

tgtgaaaaaa aaaaaaaagg attataaaag gtcagcgaag cacagaactc tgagataaga   1920

ctacctttct ttagctaggg gagaatattc gcaattgaag agctcaaaag caggtaacta   1980

tataacaaga ctaaggcaaa c   2001

<210> 23
<211> 1999
<212> DNA
<213> Saccharomyces cerevisiae

<400> 23
tcctaaggac atattccgtt cgtacttgag ttattggatc tatgaaatcg ctcgctatac   60

accagtcatg attttgtccc tggtaatagg ggttttggtt ttattaatta tattttttaa   120

tgacaacgaa gcttgtgttt tcaattctgc aatatttgct tttacttctc ttgtaggttt   180

gttaataata ttaagtgatg gtaatccaaa gctagtcagt cgtcgaaatt ttaggaccga   240

gcttttagtg gatgtcatca cacgtaaacc ggcggtagaa gggaaagaat ggaggatcat   300

cacatacaac atgaaccaat atttgtttaa tcatgggcaa tggcatactc cgtattactt   360

ttacagcgat gaggattgct accgttattt tctacgcctt gttgagggag taaccccccaa   420

gaagcaaaca gccacgtcaa ttggcaattc tccggtcacc gctaagcctg aagatgccat   480

cgagtcagct tctcctagtt ccagactgaa ttatcaaaac tttttgctca aggcagcgga   540

gatcgaacga caagctcagg aaaattactg gcgaaggcgg catcccaata tcgatgcgct   600

tcttaaaaag acggaatagc ttagagacac taccatacgt aaagcgaaca taaactagag   660

tatgatatat aatcagcact aactggccgg aaaacggccg aaggaagcct cgaaaagtcg   720

attcgtgttg gacccatttg ctgaacaaag tggttcattg cctacctatt atggtagtag   780

tcgtgataat cgtgtggttg gttttgtcaa cggtgcattt gcattttcat gacaataaac   840

cttgcgtttt cgttctcggg atattacttt ccctccactt ctttcgcctc aatagctcct   900

ataagcattc tcagggcgta tgtcggtgat cgagatttcc aagcaagctt ttagtggaaa   960

tcatcgcgcg caagccagcg gtaaagggaa aagaacggag gacgattaca tacaagatga   1020

acgaataaat aaattaataa taaataataa taaaaagtac agtagcatta aatattatta   1080

agtttaatga ttaaaaattg gttaattgtc aagaaaatct aaggtattaa taaataaata   1140

atactatgac aacttgcagc gaaagcatca gccccaatga aaattaatca gaattgaatc   1200

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tgagcgtatt tatttgataa cggtttacgt aactgttgga ataaaaatca actatcatct    1260

actaactagt gtttacgtta ctagtatatt atcatatacg gtgttagaag atgacgcaaa    1320

tgatgagaaa tagtcatcgt tttcaacgga agctgaaata caaggattga taatgtaata    1380

ggatcaatga atatcaacat ataaaacgat gataataata tttatagaat tgtgtagaat    1440

tgcagattcc cttttatgga ttcctaaatc ctcgagaaga acttctagta tatctacgta    1500

cctaatatta ttgccttatt aaaaatggaa tcccaacaat tatctcaaaa ttcccccaat    1560

tctcatcagt aacaccccac cccgtattac ttttaccgtg atgaagattg catcgttac     1620

tttctaaacg taggacgtgc ggaatgacaa aaccatcagc agtgtcacga tctctccagt    1680

cacaatggca atcatgagtg catagtccaa agtaaagggg caaggaaaag catgattgaa    1740

aggactcccc atctggactc tatatgtcat cagcggctaa aaaaaagcat atagcacaac    1800

atcagcatca gcatcagcac tagagtcatc ggcccggcgg tccgcggtca tccccgcgga    1860

ctttccgtcc gcccggcggg ctgtatcagc gtcaactgga acgcgcatat atatacaaga    1920

cacacataac atagaagcac acccacgaca ataaccacac gacaataacc acccgcccc     1980

acccctcctt tccgtatac                                                 1999


<210>  24
<211>  91
<212>  DNA
<213>  Glycine max

<400>  24
aaawtcaaac gacaataact tttkactcgg atgtccgatt gwgtcccgta rtatatcgag     60

acgctcgwaa ttgaaaacwg aagctctrag m                                    91


<210>  25
<211>  92
<212>  DNA
<213>  Glycine max

<400>  25
aaattcaaat ggtcataact tttmacwcgg akgtccgatt caggcgcata atatatcgag     60

acgctcgaaa ttgaacaayg gaagctctcg ag                                   92


<210>  26
<211>  91
<212>  DNA
<213>  Glycine max

<400>  26
aaattcaaac gacaataact ttttactcgg atgtcygatt gagtcccgta atatatcgag     60

acgctcgaaa ttgaatrytg aagctctgag c                                    91


<210>  27
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<211>  266
<212>  DNA
<213>  Brassica oleraceae


<220>
<221>  misc_feature
<222>  (38)..(38)
<223>  n = a, c, g, or t

<220>
<221>  misc_feature
<222>  (242)..(242)
<223>  n = a, c, g, or t

<400>  27
gatttagatt gtactcattc caattaccag actcgaanag cccggtattg ttatttattg      60

tcactacctc cccgtgtcag gattgggtaa tttgcgcgcc tgctgccttc cttggatgtg     120

gtagccgttt ctcaggctcc ctctccggaa tcgaaccta attctccgtc acccgttacc     180

accatggtag gccactatcc taccatcgaa agttgatagg gcagaaattt gaatgatgcg     240

tngccagcac taaggccatg cgatcg                                         266


<210>  28
<211>  345
<212>  DNA
<213>  Brassica oleraceae


<220>
<221>  misc_feature
<222>  (9)..(9)
<223>  n = a, c, g, or t

<220>
<221>  misc_feature
<222>  (17)..(17)
<223>  n = a, c, g, or t

<220>
<221>  misc_feature
<222>  (27)..(27)
<223>  n = a, c, g, or t

<220>
<221>  misc_feature
<222>  (41)..(41)
<223>  n = a, c, g, or t

<400>  28
aaactgggna aactggnaat cacctgnatt tgaaagtggg nataacttct tcatgccaac      60

tcctatgagt tttattcaac ttcctggtga ttctccacca ctttatgtat ccaaatcaag     120

cttcttacaa agtgattcat cctggtttga ttggaacgac gaacaagttg tgctattccc     180

aaacttggaa actggaatca cctgacttga aagtgggata acttcttcat cccaactcct     240

atgagattta ttcaacttcc tggtgattct ccaccacttt atgtatccaa atcaagcttc     300
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ttacaaagtg attcattctg gtttgtttgg aacgacgaag aagcg   345

<210>   29
<211>   40
<212>   DNA
<213>   Artificial sequence

<220>
<223>   Synthetic primer

<400>   29
ggtggtcggc cggagcacaa gcgggccaag cccatgcttg   40

<210>   30
<211>   41
<212>   DNA
<213>   Artificial sequence

<220>
<223>   Synthetic primer

<400>   30
ggtggtcggc cgcaggttgc atatgaatct ttaactgaca g   41

<210>   31
<211>   41
<212>   DNA
<213>   Artificial sequence

<220>
<223>   Synthetic primer

<400>   31
ggtggtcggc cgcgagcaca agcgggccaa gcccatgctt g   41

<210>   32
<211>   42
<212>   DNA
<213>   Artificial sequence

<220>
<223>   Sytnthetic primer

<400>   32
ggtggtcggc cgtcaggttg catatgaatc tttaactgac ag   42

<210>   33
<211>   39
<212>   DNA
<213>   Artificial sequence

<220>
<223>   Synthetic primer

<400>   33
ggtggtcggc cgtcgtcggc acttggcagc gaaatctcc   39

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<210>   34
<211>   42
<212>   DNA
<213>   Artificial sequence

<220>
<223>   Synthetic primer

<400>   34
ggtggtcggc cgcattatca tataattatg ttttgctgct tc                        42


<210>   35
<211>   38
<212>   DNA
<213>   Artificial sequence

<220>
<223>   Synthetic primer

<400>   35
ggtggtcggc cgcgtcggca cttggcagcg aaatctcc                             38


<210>   36
<211>   41
<212>   DNA
<213>   Artificial sequence

<220>
<223>   Synthetic primer

<400>   36
ggtggtcggc cgattatcat ataattatgt tttgctgctt c                         41


<210>   37
<211>   105
<212>   DNA
<213>   Lycopersicum


<220>
<221>   misc_feature
<222>   (18)..(18)
<223>   n = a, c, g, or t

<220>
<221>   misc_feature
<222>   (29)..(29)
<223>   n = a, c, g, or t

<400>   37
accaaatttg ttcgtggnac gtcctcaana cgttgtctat gcatacggtt ggccatcacg      60

gcctttccga cccatttgga aggtcaaacg aaccccgaag tgagc                    105


<210>   38
<211>   105
<212>   DNA
<213>   Lycopersicum
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<220>
<221> misc_feature
<222> (40)..(40)
<223> n = a, c, g, or t

<400> 38
ggttttctag ccgtttgggg aaggtcaaac gagccccggn acgagcatac gcctcatttt   60

gacgattttc gtgtgctatt gcacaccatt ttttgggtga tcgag   105

<210> 39
<211> 256
<212> DNA
<213> Lycopersicum

<400> 39
gtaacgacct gtttagtcgt tttgagcagc agatttttatt tctggaaaaa caggctgaga   60

cgacggaaac cacgacggac cgtcatgggc acgacggacc gtcgaggggg tctcgttcca   120

aaacacttag aattctgaaa tttgggtact gaaatcgact ctctgaactt cgtgaagaag   180

tggcaggacg gaccgtcgtg ggcacgacgg accgtcacag gcccttcaat aatttcagtc   240

tctgaactct gtgacg   256

<210> 40
<211> 574
<212> DNA
<213> Plant Telomere probe

<400> 40
aggcgcgcca cctgcaggag agctcggtct catcgagaca cagggtttag ggtttagggt   60

ttagggttta gggtttaggg tttagggttt agggtttagg gtttagggtt tagggtttag   120

ggtttagggt ttagggttta gggtttaggg tttagggttt agggtttagg gtttagggtt   180

tagggtttag ggtttagggt ttagggttta gggtttaggg tttagggttt agggtttagg   240

gtttagggtt tagggtttag ggtttagggt ttagggttta gggtttaggg tttagggttt   300

agggtttagg gtttagggtt tagggtttag ggtttagggt ttagggttta gggtttaggg   360

tttagggttt agggtttagg gtttagggtt tagggtttag ggtttagggt ttagggttta   420

gggtttaggg tttagggttt agggtttagg gtttagggtt tagggtttag ggtttagggt   480

ttagggttta gggtttaggg tttagggttt agggtttagg gtttagggtt tagggtttag   540

gtgagcccgg gtttaaacgc ccgggccgtc gacc   574

<210> 41
<211> 41
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic primer

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<400>  41
aggcgcgcca cctgcaggag agctcggtct catcgagaca c                            41


<210>  42
<211>  34
<212>  DNA
<213>  Artificial sequence

<220>
<223>  Synthetic primer

<400>  42
ggtcgacggc ccgggcgttt aaacccgggc tcac                                    34


<210>  43
<211>  155
<212>  DNA
<213>  Glycine max


<220>
<221>  misc_feature
<222>  (4)..(4)
<223>  n = a, c, g, or t

<220>
<221>  misc_feature
<222>  (26)..(26)
<223>  n = a, c, g, or t

<400>  43
gttnttgtcg tttgaatttg ctgagnacct tcaacattca atttcgagcg tctcgatata      60

ttacgggact taatcagaca atcgagtaaa aagttattgt cgtttgaatt tgctcagagc     120

ttctgttttc aattacgagc gtctcgatat attac                               155


<210>  44
<211>  167
<212>  DNA
<213>  Glycine max


<220>
<221>  misc_feature
<222>  (6)..(6)
<223>  n = a, c, g, or t

<220>
<221>  misc_feature
<222>  (13)..(13)
<223>  n = a, c, g, or t

<220>
<221>  misc_feature
<222>  (31)..(31)
<223>  n = a, c, g, or t

<220>
<221>  misc_feature
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<222>  (39)..(39)
<223>  n = a, c, g, or t


<220>
<221>  misc_feature
<222>  (54)..(54)
<223>  n = a, c, g, or t


<220>
<221>  misc_feature
<222>  (65)..(65)
<223>  n = a, c, g, or t


<220>
<221>  misc_feature
<222>  (96)..(96)
<223>  n = a, c, g, or t

<400>  44
gtccgnatca ggncgcataa tatatgcgag nacgctagna aattgaataa tggnaagcac     60

tcganaaatt caaatggtca taactttcca cacggnaggt tagattcaag cgcataatat    120

atagagaagc tcgaaatata acaactaaag ctctcgcgaa attcaaa                  167


<210>  45
<211>  216
<212>  DNA
<213>  Glycine max


<220>
<221>  misc_feature
<222>  (34)..(34)
<223>  n = a, c, g, or t

<400>  45
ggcagagttt ttggtttttt catgttgtca aagnagttga acaatgaaaa tggatgacta     60

gtgcctgatc gaattgatcg gatcatgtag gaacaaggtt caagtctacc ggtctgttag    120

gatgcctcag ctgcatacat cactgcactt ccacttgaca cctatcatta attagaaacg    180

gctcgtctcg ccgtgacctt ctcttgaatt ctcaaa                              216


<210>  46
<211>  605
<212>  DNA
<213>  Glycine max


<220>
<221>  misc_feature
<222>  (368)..(368)
<223>  n = a, c, g, or t

<400>  46
ggtgttgggc ctttaaaaat gatccttta acttggtaag aaaagctgag ataaaacttt      60

caaatctttt tttagtgatt ttttggtgga cgagcttgac ttggcgaatt gattttagcc    120
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ttagtttcgc tttagttatt agtcaattca attaagaatg ataaatccca aagagaaaat    180

gtccgattga tttttgtgct tcattttact aaagatatt  cttttgatta ttatattatt    240

attttacctc ttttttttgat ttccaacgtg gttacggcac gaccgagcgg ttggaactcc    300

ttttaacaga aattaatgaa tactacaatt caaatgatcg atggaaattt attttatttt    360

tagattangc gcgaaatgac ttaaataaat gactgaagca tgtcaaaagg gggtatggaa    420

agtaatgaaa ataagaataa aaatacatga aacacaatgt ggaccactac gggtacatag    480

aatgaatcga aaagcttggt tcgaggtact tacccgttga agatcgaaga acgatgaaga    540

acgaatgaag aacgtcgaag aacgattgaa agctttgcga gattcctcac gggaaaacgt    600

tacgg                                                                605


<210>   47
<211>   24
<212>   DNA
<213>   Artificial sequence

<220>
<223>   Synthetic probe

<400>   47
tgaacggcca cgagttcgag atcg                                            24


<210>   48
<211>   24
<212>   DNA
<213>   Artificial sequence

<220>
<223>   Synthetic probe

<400>   48
gtcctcgttg tgggaggtga tgtc                                            24


<210>   49
<211>   24
<212>   DNA
<213>   Artificial sequence

<220>
<223>   Synthetic probe

<400>   49
ctgccactcc atttccttct cggc                                            24


<210>   50
<211>   24
<212>   DNA
<213>   Artificial sequence

<220>
<223>   Synthetic probe
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<400>  50
acttatccgg tcctagatca tcag                                              24


<210>  51
<211>  176
<212>  DNA
<213>  Brassica oleraceae

<400>  51
agcttgattt ggatacataa agtggtggag aatcaccagg aagttgaata aatctcatag      60

gagttggcat gaagaagtta tcccmctttc aaatcaggtg attccagttt cccagtttgg     120

gaatagcaca gcttcttcgt cgttccaatc aaaccaggat gaatctcttt gtaaga         176


<210>  52
<211>  176
<212>  DNA
<213>  Brassica oleraceae

<400>  52
accttcattt ggatacataa agtagtgkag aatcaccagg aagttgaata aatctcatag      60

gagttaggat gaagaagtta tcccactttc aaataaggtg atcccagttt ycctgtttgg     120

gaatatgaca acttcttcgt cattctaatc aaaccaggat gaatckygat gtwaga         176
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